

AMENDMENTS TO THE CLAIMS

Claim 1 (withdrawn): A method for determining cyclase inhibiting parathyroid hormone (CIP) in a sample comprising:

- a) adding to the sample a labeled antibody or antibody fragment specific for a peptide sequence for CIP that presents an epitope available for antibody binding in CIP, but will not bind to this same peptide sequence in cyclase activating parathyroid hormone, in an amount sufficient to bind the CIP present;
- b) allowing the labeled antibody to bind to any CIP present, thereby forming a complex; and
- c) measuring the amount of labeled complex.

Claim 2 (withdrawn): The method of Claim 1 wherein the labeled CIP antibody or antibody fragment is one of the following, a monoclonal antibody and a polyclonal antibody.

Claim 3 (withdrawn): The method of claim 1 wherein a second antibody is added which is bound to a solid support and specifically binds to a portion of CIP other than that of the labeled antibody, thereby forming a complex.

Claim 4 (withdrawn): The method of Claim 3 wherein the solid support is selected from the group consisting of a protein binding surface, colloidal metal particles, iron oxide particles, latex particles, and polymeric beads.

Claim 5 (withdrawn): The method of Claim 3 wherein the complex precipitates from solution.

Claim 6 (withdrawn): The method of Claim 1 wherein the label or signal generating component is selected from the group consisting of chemiluminescent agents, colorimetric agents, energy transfer agents, enzymes, fluorescent agents, and radioisotopes.

Claim 7 (currently amended): A method for measuring the amount of cyclase inhibiting parathyroid hormone (CIP) fragment in a sample comprising:

- a) adding to the sample a first antibody or antibody fragment specific for a peptide sequence for CIP that presents an epitope available for antibody binding in CIP, but does not bind to this same peptide sequence in cyclase activating parathyroid hormone, ~~in an amount sufficient to bind the CIP present~~ wherein the CIP comprises an amino acid sequence from between PTH₂₋₈₄ (SEQ ID NO: 4) and PTH₃₄₋₈₄ (SEQ ID NO: 5);
- b) allowing the first antibody to bind to any CIP present, thereby forming a complex;
- c) adding a second antibody that specifically binds to a portion of CIP other than the ~~initial~~ peptide sequence which binds to the first antibody and allowing the second antibody to bind to the complex, wherein said first antibody or said second antibody has a label or signal generating component attached thereto; and
- d) ~~measuring this~~ determining the presence, absence or amount of the labeled complex.

Claim 8 (original): The method of Claim 7 wherein the second labeled antibody is added sequentially or simultaneously with the first antibody.

Claim 9 (original): The method of Claim 7 wherein the first antibody is bound to a solid support.

Claims 10-11 (cancelled)

Claim 12 (withdrawn): A method for measuring cyclase inhibiting parathyroid hormone (CIP) by means of a precipitating or turbidometric immunoassay comprising:

- a) adding to the sample a first antibody or antibody fragment specific for a peptide sequence for CIP that presents an epitope available for antibody binding in CIP, but does not bind to this same peptide sequence in cyclase activating parathyroid hormone, in an amount sufficient to bind the CIP present, said antibody being attached to a colloidal particle or moiety which can be used to detect a signal change;
- b) allowing the antibody to bind to any CIP present, thereby forming a complex; and
- c) measuring the change in signal due to the formation of the complex.

Claim 13 (withdrawn, re-numbered (formerly claim 14)): A substantially pure antibody or antibody fragment sample a labeled antibody or antibody fragment specific for a peptide sequence for cyclase inhibiting parathyroid hormone that comprises an epitope available for antibody binding in CIP, but does not bind to this same peptide sequence in cyclase activating parathyroid hormone.

Claim 14 (withdrawn, re-numbered (formerly claim 15)): The antibody of Claim 14 wherein the antibody is one of the following, a monoclonal and a polyclonal antibody.

Claim 15 (withdrawn, re-numbered (formerly claim 16)): A kit containing reagents for performing an assay for cyclase inhibiting parathyroid hormone (CIP) comprising:

- a) a substantially pure antibody or antibody fragment specific for a peptide sequence for CIP that presents an epitope available for antibody binding in CIP, but is not specific for this same peptide sequence in cyclase activating parathyroid hormone; and
- b) a labeling component that binds to CIP, but not to the CIP antibody epitope bound by the first antibody.

Claim 16 (withdrawn, re-numbered (formerly claim 17)): The kit of Claim 16 also comprising an antibody specific for the C-terminal portion of CIP.

Claim 17 (currently amended, re-numbered (formerly claim 18)): A kit containing agents for performing an assay for cyclase inhibiting parathyroid hormone (CIP) comprising:

- a) a first ~~substantially pure~~ antibody or antibody fragment specific for a peptide sequence for CIP that presents an epitope available for antibody binding in CIP, but does not bind to this same peptide sequence in cyclase activating parathyroid hormone; and
- b) a second antibody that ~~binds to CIP, but not to be the first CIP antibody epitope~~ specifically binds to a portion of CIP other than the peptide sequence which binds to the first antibody, which is bound to a solid support.

Claim 18 (currently amended, re-numbered (formerly claim 19)): The kit of Claim ~~[[18]]~~ 17 ~~also further~~ comprising an antibody specific for the C-terminal portion of CIP.

Claim 19 (currently amended): The method of Claim ~~[[11]]~~ 7 wherein the second antibody is bound to a solid support, and wherein the solid support is selected from the group consisting of a protein binding surface, a colloidal metal ~~partieles~~ particle, an iron oxide ~~partieles~~ particle, a latex ~~partieles~~ particle, and a polymeric ~~beads~~ bead.

Claim 20 (currently amended): The method of Claim ~~[[11]]~~ 19 wherein the labeled complex precipitates from solution.

Claim 21 (currently amended): The method of Claim 7 wherein the label or signal generating component is selected from the group consisting of a chemiluminescent ~~agents~~ agent, a colorimetric ~~agents~~ agent, an energy transfer ~~agents~~ agent, an enzymes enzyme, a fluorescent ~~agents~~ agent, and a radioisotopes radioisotope.

Claim 22 (previously presented): The method of claim 7, wherein the label or signal generating component is attached to the first antibody.

Claim 23 (previously presented): The method of claim 7, wherein the label or signal generating component is attached to the second antibody.

Claim 24 (previously presented): The method of Claim 7 wherein the first antibody or antibody fragment is either of the following, a monoclonal antibody or a polyclonal antibody.

Claim 25 (previously presented): The method of Claim 7 wherein the second antibody or antibody fragment is either of the following, a monoclonal antibody or a polyclonal antibody.